

## Definitions:

$C$  = real annual coupon, payable semiannually = 3.375

$i$  = real yield = 0.03449

$n$  = number of full semiannual periods from issue date to maturity date = 19

$r$  = number of days from settlement date to next coupon date = 159 (February 6, 1997, to July 15, 1997)

$s$  = number of days in current semiannual period = 181 (January 15, 1997, to July 15, 1997)

Ref CPI<sub>January 15, 1997 (dated date)</sub> = 158.43548

Ref CPI<sub>February 6, 1997</sub> = 158.60000

SA = Settlement Amount

## Resolution:

Index Ratio<sub>February 6, 1997</sub> = Ref CPI<sub>February 6, 1997</sub> / Ref CPI<sub>January 15, 1997</sub> =  
158.60000/158.43548 = 1.00104

$v^n = 1 / (1 + i/2)^n = 1 / (1 + 0.03449/2)^{19} = 0.72262717$

$a_{\overline{n}|} = (1 - v^n) / (i/2) = (1 - 0.72262717) / (0.03449/2) = 16.08424645$

$$P = \frac{(C/2) + (C/2)a_{\overline{n}|} + 100v^n}{1 + (r/s)(i/2)} - [(s-r) / s] (C/2)$$

$$P = \frac{(3.375/2) + (3.375/2)(16.08424645) + 100 (0.72262717)}{1 + (159/181)(0.03449/2)} - [(181-159)/181] (3.375/2)$$

$P = 99.378686$

$P = 99.379$

$P_{adj} = P \times \text{Index Ratio}_{\text{February 6, 1997}}$

$P_{adj} = 99.379 \times 1.00104 = 99.482354$

$P_{adj} = 99.482$

$A = [(181-159)/181] \times 3.375/2 = 0.205110$

$A_{adj} = A \times \text{Index Ratio}_{\text{February 6, 1997}}$

$A_{adj} = 0.205110 \times 1.00104 = 0.205323$

$SA = P_{adj} + A_{adj} = 99.482 + 0.205323$

$SA = 99.687323$

Note that, for the real price (P) and the inflation-adjusted price ( $P_{adj}$ ), Treasury has rounded to three places. For accrued interest (A) and adjusted accrued interest ( $A_{adj}$ ), Treasury has rounded to six places. These amounts are based on 100 par value.